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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,229	10/04/2001	Susie J. Wee	HP-10016300	4644

7590 01/13/2005

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EXAMINER

SHIFERAW, ELENI A

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/972,229

**Applicant(s)**

WEE ET AL.

**Examiner**

Eleni A Shiferaw

**Art Unit**

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/04/01, 07/01/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

1. Claims 1-39 are presented for examination.

### *Drawings*

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because Figure 10A-10D are missing legend. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### *Double Patenting*

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1-39 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13, 1, and 21 of copending Application No. 09/849,794. Although the conflicting claims are not identical, they are not patentably distinct from each other because an earlier filed application 09/849,794 specifically discloses

Art Unit: 2136

Earlier filed patent application 09/849,794 Claim 13

a segmenter, said segmenter adapted to receive data and segment said data into corresponding regions;

a scalable encoder coupled to said segmenter, said scalable encoder adapted to encode at least one of said regions into scalable data;

a progressive encrypter coupled to said scalable encoder, said progressive encrypter adapted to progressively encrypt said scalable data to generate progressively encrypted scalable data; and

a packetizer coupled to said progressive encrypter, said packetizer adapted to packetize said progressively encrypted scalable data.

A later filed patent application 09/972,229 has claims that read as follows:

Application Claim 1:

a segmenter adapted to receive said data and segment at least a portion of said data into regions;

a scalable encoder coupled to said segmenter, said scalable encoder adapted to scalably encode at least one of said regions into scalably encoded data; and

a progressive encrypter coupled to said scalable encoder, said progressive encrypter adapted to progressively encrypt at least a portion of said scalably encoded data into progressively encrypted scalably encoded data.

The only difference between these two claims is that in the later filed case the “a packetizer coupled to said progressive encrypter, said packetizer adapted to packetize said

progressively encrypted scalable data.” is omitted. Clearly, applicant is attempting to obtain broader coverage in the claim of the application.

Earlier filed patent application 09/849,794 Claim 1

- a) receiving data;
- b) segmenting said data into corresponding regions;
- c) scalably encoding at least one of said regions into scalable data;
- d) progressively encrypting said scalable data to generate progressively encrypted scalable data;
- and
- e) packetizing said progressively encrypted scalable data.

Later application 09/972,229 Claim 14:

- a) receiving said data;
- b) segmenting at least a portion of said data into regions;
- c) encoding at least one of said regions into scalably encoded data; and
- d) encrypting at least a portion of said scalably encoded data into progressively encrypted scalably encoded data.

The only difference between these two claims is that in the later filed case the “e) packetizing said progressively encrypted scalable data.” is omitted. Clearly, applicant is attempting to obtain broader coverage in the claim of the application.

Earlier filed patent application 09/849,794 Claim 21

- a) receiving data;
- b) segmenting said data into corresponding regions;
- c) scalably encoding at least one of said regions into scalable data;
- d) progressively encrypting said scalable data to generate progressively encrypted scalable data; and
- e) packetizing said progressively encrypted scalable data.

Later application 09/972,229 Claim 27:

- a) receiving said data;
- b) segmenting at least a portion of said data into regions;
- c) encoding at least one of said regions into scalably encoded data; and
- d) encrypting at least a portion of said scalably encoded data into progressively encrypted scalably encoded data.

The only difference between these two claims is that in the later filed case the “e) packetizing said progressively encrypted scalable data.” is omitted. Clearly, applicant is attempting to obtain broader coverage in the claim of the application.

As stated above, the only differences between the claims is that the prior art on claim 13 has: a packetizer coupled to said progressive encrypter, said packetizer adapted to packetize said progressively encrypted scalable data, prior art on claim 1 has: e) packetizing said progressively encrypted scalable data, and prior art on claim 21 has: e) packetizing said progressively encrypted scalable data. The question then becomes – Does the omission of the limitations stated above constitute an obvious expedient to one of ordinary skill in the art?

It is well settled that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karlson, 136 USPQ 184 (CCPA 1963). Also EX parte Rainu, 168 USPQ 375 (Bd. App. 1969). Omission of a reference element whose function is not needed would be obvious to one of ordinary skill in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, 10-19, 23-32, and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al. (Nakagawa Patent No.: US 6,810,131 B2) in view of Perlman et al. (Perlman Patent Number 6,055,316).

As per claims 1, 14, and 27 Nakagawa teaches a device/method for encoding and encrypting data, said device comprising:

a segmenter adapted to receive said data and segment at least a portion of said data into regions (Nakagawa Fig. 15 No. 1100 and 1200);

a scalable encoder coupled to said segmenter, said scalable encoder adapted to scalably encode at least one of said regions into scalably encoded data (Nakagawa Fig. 19, encoding side); and

a encrypter, said encrypter adapted to encrypt said scalably encoded data into encrypted scalably encoded data (Nakagawa Fig. 15 No. 1108, and col. 3 lines 44-48).

Nakagawa does not explicitly teach the encrypter is progressive encrypter.

Perlman teaches a progressive encrypter encrypts at least a portion of data (Perlman Fig. 2 and col. 6 lines 26-60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Perlman within the system of Nakagawa because it would allow to provide at least some content to everyone, even if users are not going to pay the full version. This way, the content provider can send low quality “previews” to a larger viewing audience (see Perlman col. 1 lines 66-col. 2 lines 12). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Perlman within the system of Nakagawa to progressively encrypt portions of the scalably encoded data and generate progressively encrypted scalably encoded data because it would allow data to be streamed to heterogeneous client receiving nodes that may have different display, power, communication and computational capabilities and characteristics.



As per claims 2, 15, and 28, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said device is coupled to a packetizer, wherein said packetizer is adapted to receive said progressively encrypted scalably encoded data in real time as said progressively encrypted scalably encoded data are output from said progressive encrypter (Fig. 15 No. 1302).

As per claims 3, 16, and 29, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method comprising: a storage unit coupled to said progressive encrypter, said storage unit adapted to store said progressively encrypted scalably encoded data (Nakagawa Fig. 15 No. 1105, and see also Perlman col. 12 lines 21-24).

As per claims 4, 17, and 30, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said device is coupled to a packetizer, wherein said packetizer is adapted to receive at least a portion of said progressively encrypted scalably encoded data stored in said storage unit (Nakagawa Fig. 15 No. 1302).

As per claims 5, 18, and 31, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said data are selected from the group consisting of: video data, audio data, image data, graphic data, and web page data

(Nakagawa Col. 2 lines 42-45).

As per claims 6, 19, and 32, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said segmenter is adapted to receive prediction error video data (Nakagawa Col. 17 lines 61-66).

As per claims 10, 23, and 36, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method comprising: a video prediction unit coupled to said segmenter, said video prediction unit adapted to generate prediction error video data (Nakagawa Col. 17lines 61-66).

As per claims 11, 24, and 37, both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said scalable encoder is adapted to encode said at least one of said regions into scalable data and into header data, wherein said header data provide information corresponding to said scalable data (Nakagawa Col. 16 lines 17-27).

As per claims 12 and 25, and 38 both Nakagawa and Perlman teach all the subject matter as described above. In addition Nakagawa teaches the device/method wherein said progressive encrypter is adapted to encrypt said header data (Nakagawa Col. 16 lines 17-27).

As per claims 13, 26, and 39 both Nakagawa and Perlman teach all the subject matter as

Art Unit: 2136

described above. In addition Nakagawa teaches the device/method wherein said header data comprise information allowing a transcoder to transcode said progressively encrypted scalably encoded data without decrypting and decoding said progressively encrypted scalably encoded data (Nakagawa Col. 16 lines 17-27).

6. Claims 7-9, 20-22, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al. (Nakagawa Patent No.: US 6,810,131 B2) in view of Perlman et al. (Perlman Patent Number 6,055,316), and in further view of Van der Auwera et al. (Van Patent No.: US 6,532,265 B1).

As per claims 7-9, 20-22, and 33-35 both Nakagawa and Perlman teach all the subject matter as described above. Nakagawa and Perlman do not explicitly teach segmenting said data into rectangular regions, non-rectangular regions, and overlapping regions.

Van teaches segmenting said data into corresponding rectangular regions, non-rectangular regions, and overlapping regions (Van col. 2 lines 20-28).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Van within the combination system of Nakagawa and Perlman because it would allow to decrypt data without waiting for the whole data to be received by the receiver and perform easier encoding and encrypting/decrypting system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eleni A Shiferaw whose telephone number is 571-272-3867. The examiner can normally be reached on Mon-Fri 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eleni Shiferaw  
Art Unit 2136  
December 23, 2004

CSL  
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